



imposing this limitation on the condition. Generally hazardous materials pose the same security risks and require the same security precautions as acutely hazardous materials and, therefore, should not be exempted from the condition.

- B. Limiting background checks to only on site employees of the project owner unnecessarily excludes the application of security precautions to other workers at the site.

The original wording of this provision ensured that, at a minimum, a cursory background check would be performed on all personnel who could possibly gain access, authorized or otherwise, to sensitive materials or areas, to confirm the identity of persons working around the project site. (RT 10/16/02 p. 515.) The proposed changes would unnecessarily limit this provision by excluding subcontractors, vendors, and others not working directly for the project owner despite the fact that these individuals could pose the same security risks as direct employees of the project owner.

- C. Exempting the transportation of hazardous materials from the Vulnerability Assessment unnecessarily reduces the effectiveness of the assessment.

Finally, the applicant suggests various changes to the requirement for a vulnerability assessment. The Commission must ensure that all aspects of the proposed project, one of which is the transportation of hazardous materials to the site, are safe. Ensuring the security of the transportation of hazardous materials to the proposed project is consistent with other conditions of certification adopted by the Commission. (RT 10/16/02 pp. 515-516.) By excluding from the vulnerability assessment the transportation of any hazardous materials to and from the site, the Commission would be failing to address a potentially vulnerable aspect of power plant operations. Thus removing “transportation” from the condition is unwarranted. And, as discussed above, adding the word “acutely” unnecessarily exempts application of the condition to materials that pose a potential security risk and is unjustified.

Because the Applicant has expressed concern with both the background check and the vulnerability assessment, staff has included language clarifying the extent of the information required. This clarifying language has become a permanent part of this standard condition to be applied consistently in new certification proceedings. The condition of certification COM-9 should thus read:

### **Construction and Operation Security Plan, COM-9**

Prior to commencing construction, a site-specific Security Plan for the construction phase shall be developed and maintained at the project site. At least 60 days prior to the initial receipt of acutely hazardous materials on-site, a site-specific Security Plan and Vulnerability Assessment for the operational phase shall be developed and maintained at the project site. The project owner shall notify the CPM in writing that the Plan is available for review and approval at the project site.

## Construction Security Plan

The Construction Security Plan must address:

1. site fencing enclosing the construction area;
2. use of security guards;
3. check-in procedure or tag system for construction personnel and visitors;
4. protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency; and
5. evacuation procedures.

## Operation Security Plan

The Operations Security Plan must address:

1. permanent site fencing and security gate;
2. use of security guards;
3. security alarm for critical structures;
4. protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency;
5. evacuation procedures;
6. perimeter breach detectors and on-site motion detectors;
7. video or still camera monitoring system;
8. fire alarm monitoring system;
9. site personnel background checks for on-site employees of the project owner; [Site personnel background checks are limited to ascertaining that the employee's claims of identity and employment history are accurate. All site personnel background checks must be consistent with state and federal law regarding security and privacy.]; and
10. site access for vendors and requirements for acutely Hazardous Materials vendors to conduct personnel background security checks of personnel delivering bulk chemicals to EAEG [Site access for vendors must be strictly controlled. Consistent with recent state and current federal regulations governing the transport of hazardous materials, hazardous materials vendors will have to maintain their transport vehicle fleet and employ only drivers properly licensed and trained. The project owner is required, through the use of contractual language with vendors, to ensure that vendors supplying hazardous materials conduct personnel background checks on any employee involved in the transportation and delivery of hazardous materials to the power plant. All vendor related personnel background checks will be consistent with

site personnel background checks, as per above, including state and federal law regarding security and privacy.].

11. In addition, the project owner shall prepare a Vulnerability Assessment and implement site security measures addressing acutely hazardous materials storage and transportation consistent with US EPA and US Department of Justice guidelines [Chemical Vulnerability Assessment Methodology (July 2002)]. The level of security to be implemented is a function of the likelihood of an adversary attack, the likelihood of adversary success in causing a catastrophic event, and the severity of consequences of that event. This Vulnerability Assessment will be based, in part, on the use and storage of certain quantities of acutely hazardous materials as described by the California Accidental Release Prevention Program (Cal-ARP, Health and Safety Code section 25531). Thus, the results of the off-site consequence analysis prepared as part of the Risk Management Plan (RMP) will be used to determine the severity of consequences of a catastrophic event and hence the level of security measures to be provided.

The CPM may authorize modifications to these measures, or may require additional measures depending on circumstances unique to the facility, and in response to industry-related security concerns.

#### D. Conclusion

The changes requested by Applicant have not been adopted in prior certification proceedings, such as the Malburg Generating Station (01-AFC-11), and the adoption of changes here would lead to the inconsistent application of security measures without a justifiable reason for the inconsistency.

The applicant has provided no justification for why EAEC should be entitled to exercise a lesser degree of security precautions than plants one-tenth its size. Given the size of EAEC, and the large quantities of hazardous materials to be used, it is imperative that the project fully institute sound security measures, and that the Energy Commission consistently apply this condition.

### III. SOIL AND WATER RESOURCES

- A. State Water Resources Control Board Resolution 75-58 supports the use of recycled water in this case and does not allow the decision regarding such use to be left to Byron-Bethany Irrigation District.

State Water Resources Control Board's "Water Quality Control Policy on the Use and Disposal of Inland Waters Used for Powerplant Cooling" (Resolution 75-58) sets forth the State Water Resources Control Board's policy that fresh inland waters should be the lowest priority source of power plant cooling water and that the loss of fresh inland

waters through evaporation in power plant cooling facilities may be considered an unreasonable use of inland waters. As a state agency, the Energy Commission should note Water Code section 13146 specifying that state agencies shall comply with state water policy. Section 13146 states in pertinent part, “State offices, departments and boards, in carrying out activities which affect water quality, shall comply with state policy for water quality control....”(Water Code §13146.) Moreover, as identified by the Contra Costa Water District, the EAEC’s use of fresh water has direct adverse water quality implications. (CCWD Comments on Draft PSA/PEA of East Altamont Energy Center, January 18, 2002 (“[i]ncreasing fresh water diversions can increase the intrusion of salt water from the bay into the Delta.”).) Therefore, the Energy Commission must apply the water policy embodied in Resolution 75-58.

Resolution 75-58 specifies that alternatives to fresh inland waters be used for power plant cooling. Wastewater is given first priority for such use if environmentally, technically, and economically feasible. Such feasibility in this case has been identified and is supported by substantial evidence in the record. (Exh. 2WWW; Exh. 2EEE; Exh. 8-L.)

The RPMPD claims that Resolution 75-58’s waste discharge provisions are not at issue because the applicant will employ a zero liquid discharge system at EAEC. (RPMPD p. 339.) Although it is true that Resolution 75-58 contains waste discharge prohibitions, they only form a part of the policy and do not determine when the policy applies. The resolution is clear that the purpose of the policy is “to provide consistent statewide water quality principles and guidance for...implementation actions for powerplants which depend upon inland waters for cooling.” The first principle states that water for power plant cooling should come from sources other than fresh inland water. Nowhere in the resolution is it stated that the application of the policy is limited only to instances where waste discharge will occur. Therefore Resolution 75-58 does apply in this case and must be implemented by the Commission.

B. Statutes dealing with potable domestic water are relevant to the Energy Commission’s review of the EAEC.

The RPMPD states that statutes referencing potable water, such as Water Code section 13550 et seq., are irrelevant to the Commission’s analysis of this project. Staff respectfully disagrees. It is important to note that Water Code section 13550 et seq. uses the term “potable domestic water.” The Water Code contains no definition of potable domestic water. The definition previously referred to by the applicant in the Health and Safety Code is inapplicable because it is specifically limited to use of the term solely within the Safe Drinking Water Act and nowhere claims to define potable domestic water as used in the Water Code.<sup>1</sup>

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<sup>1</sup> The Health and Safety Code defines “potable water” not “potable domestic water” which is used in the Water Code. Had the legislature intended the Health and Safety Code definition to apply, they would have used the same term and conceivably would have referenced the location of the definition.

1. The reference to potable domestic water contained in Water Code 13550 includes water capable of being made potable.

Section 13551 addresses the availability of recycled water and refers to “any source of quality *suitable* for potable domestic use.” Water from the Delta is certainly suitable for potable domestic use. It is undisputed that the Sacramento-San Joaquin Delta, from which the project will obtain its water, provides drinking water for a large percentage of California’s population. (*Management of the California State Water Project*, Bulletin 132-99, p. 42.) As a source of drinking water, the Delta is, thus, a source of potable water. The Delta is constantly monitored for water quality to ensure that it can continue to meet “demands for safe, *potable* water supplies.” (*Id.* at p. 44 (emphasis added).)

2. Even if potable domestic water were defined narrowly, Water Code section 13550 is still relevant to the Energy Commission’s review of this power plant.

Even if potable water is read narrowly, Water Code section 13550 et seq. is relevant because it expresses the policy of the state to require and encourage the use of recycled water, or other alternatives to freshwater, when such alternatives are available. The Committee might determine that section 13550 is not an applicable law for purposes of making a finding under Public Resources Code section 25523(d), but to state that it is completely irrelevant to the Commission’s certification process is inaccurate.

- C. Condition of Certification Soil and Water 5, as written, which gives BBID exclusive authority to determine EAEC’s use of recycled water, is insufficient to ensure that the Energy Commission’s statutory and CEQA obligations are met.

It is inappropriate to leave the decision of how much recycled water EAEC will use, if any at all, to BBID for several reasons. With respect to local, regional, and state law, the Commission is vested with exclusive authority to condition a project. (Pub. Resources Code §25216.5.) BBID is merely a potential vendor of water to the project. Delegating authority to BBID to determine what conditions are imposed on the project would conceptually be akin to giving the project’s supplier of ammonia the authority to determine whether the project will use anhydrous ammonia or aqueous ammonia, and the specifications for such use.

Because BBID has clear financial, and other, incentives to provide EAEC with fresh water before providing it with recycled water, the availability of recycled water will not be the only factor in determining whether or not BBID provides such water to EAEC. (Exh. 8-1.) If BBID decides not to provide recycled water to EAEC or any of its other potential customers based on profit motives or a desire to serve as much fresh inland water as available to justify keeping its full allocation of water from the State Water Project, the water will not be made available to BBID’s customers and would thus be discharged into the Delta. (RT 10/16/02 p. 360.) The condition of certification Soil and Water 5 does

nothing to discourage this, and in fact facilitates such a decision, in direct contravention of the policy of Resolution 75-58 and the Committee's own findings that such a scenario would be deemed an unreasonable use of water. (RPMPD p. 362.)

1. Consistent with the Committee's own finding, the condition should require the applicant to formally request recycled water service from BBID pursuant to Water Code section 13580.7.

Requiring the applicant to request recycled water pursuant to Water Code section 13580.7 would simply invoke the statutory scheme of the Water Recycling Act of 1991 that promotes the use of reclaimed water. Indeed, any of BBID's customers could make similar requests pursuant to section 13580.7. Thus, requiring the applicant to do so would only subject BBID to the statutory provisions that BBID's other customers may also invoke. The condition would not impose any additional burdens or constraints on BBID and would ensure that the correct process set forth in the Water Code for requesting recycled water service is used.

2. The condition should remove the specification of an 18-inch pipeline.

An 18-inch pipeline may not be sufficiently large enough to transport the 5,900 gpm of recycled water the project may eventually use. (RT 10/16/02 p. 228.) Due to this concern, staff respectfully recommends deleting reference to the 18 inches and merely specifying that the pipeline shall be capable of supplying 5,900 gpm of recycled water. This in no way changes the substance of the condition, and merely ensures that it is consistent with the 5,900 gpm specification identified in the MOU between BBID and EAEC.

- D. Staff's suggested modifications to the condition of certification are reasonable and should be made.

For the above stated reasons, staff suggests the following modifications to Soil and Water 5:

Prior to plant operation an ~~18-inch pipeline to~~ capable of conveying recycled water from MHCSD's treatment facilities to EAEC shall be built. Prior to the start of project operation, the project owner shall submit a formal request to BBID pursuant to Water Code section 13580.7 for recycled water to satisfy the cooling water needs of the project. Applicant ~~Prior to using fresh inland water, the project owner shall accept use all the recycled water available to convey to the project offered to it by BBID~~ at a cost comparable to or lower than the cost of potable water.

**Verification:** No later than sixty (60) days prior to the start of plant operation, the project owner shall submit to the CPM evidence that the pipeline has been built and is capable of conveying no less than 5,900 gpm to EAEC. No later

than 220 days prior to start of plant operation, the project owner shall submit to the CPM evidence that a formal request for recycled water pursuant to Water Code section 13580.7 has been made. No later than 60 days prior to the start of plant operation, the project owner shall submit to the CPM the contract detailing the rate and conditions for recycled water service established pursuant to Water Code section 13580.7, and

~~Prior to commencing operations owner shall submit a signed copy of a water supply agreement with BBID setting forth the rates and conditions for the fresh and recycled water supply.~~

#### **IV. AIR QUALITY**

- A. Staff used a methodology that is sound and based on an approved California Air Resources Board (CARB) study.

The RPMPD states that staff's methodology is not well enough established to substitute it for SJVUAPCD's analysis, and that this conclusion might be different if staff's methodology had been endorsed by the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), or the District. (RPMPD pp. 152-153.) In fact, the methodology staff used to recommend mitigation in the amount of 175 tons per year of NOx offsets and 50 tons per year of PM10 offsets was taken directly from a published CARB study on the transport of pollutants from the Bay Area to the San Joaquin Valley, and was used by the SJVUAPCD in its Air Quality Planning documents. (Exh. 1, p. 5.1-26.) The District forwarded these planning documents to CARB and the EPA for review and adoption in the State Implementation Plan. SJVUAPCD has not called into question the validity of the CARB study and in fact used the transport factor as part of its methodology in both the Tesla Power Plant Project (01-AFC-21) and EAEC. (Exh. 2AA; Exh. 6T.) Therefore, the methodology used by staff has in effect been reviewed by all three agencies listed in the RPMPD; any concern regarding the study's validity would have already surfaced. Staff applied CARB's methodology in the same manner as the study and there is no indication that the methodology cannot also be applied to PM10 emissions. (Exh. 1, p. 5.1-26.) The only deviation staff could possibly be faulted for is the establishment of a transport factor that increases credit for ERCs purchased in the Pittsburg and Livermore areas. (Exh. 1, p. 5.1-11.) No one has claimed that this deviation, based upon specific climatological data, was unwarranted.

To clarify a statement contained in the RPMPD, staff is not suggesting that the Committee override the determination of BAAQMD in preference for CEQA. A determination that a project complies with LORS is separate from a determination that a project will not result in a significant impact to the environment. In certain instances compliance with LORS is sufficient to ensure that project impacts will be less than significant. As SJVUAPCD acknowledges, such is not the case here because the ERCs purchased to comply with LORS in one air district do not mitigate for impacts that will

occur in another. (RT 10/21/02 p. 381.) Therefore, a determination that further offsets are required to mitigate impacts to a less than significant level is a separate determination than whether a project complies with LORS, and one determination does not override the other.

- B. PM2.5 is relevant in determining whether or not the project results in significant adverse impacts.

The RPMPD states that PM2.5 is irrelevant to the Commission's analysis because the standards have not been violated, implementation of the new AAQS has not commenced, and PM2.5 is dominated by other sources in the region. (RPMPD p. 153.) Staff concurs that PM2.5 standards are not enforceable at this time and, therefore, no finding is necessary with respect to compliance with an applicable rule or standard. However, PM2.5 is still relevant under CEQA with respect to a potentially significant adverse air quality impact.

PM2.5 emissions have public health implications and must be considered when determining whether a project results in a significant impact to the environment. In this case, the project's PM2.5 emissions add to the PM2.5 emissions from other sources. The evidence in the record supports a determination that measured levels of PM2.5 have exceeded the federal PM2.5 standard even though there has not yet been a determination of attainment status. Therefore, the Commission must determine whether the EAEC's PM2.5 emissions, when combined with the existing cumulative impact of other projects, is cumulatively considerable. If it is, then the project must mitigate for its contribution to the significant impact, regardless of whether that contribution is small when compared with the contribution of other sources.

- C. The Bay Area Air Quality Management District (BAAQMD) did not make a determination that local and cumulative impacts were fully mitigated.

The RPMPD states that BAAQMD determined that local impacts and cumulative impacts were fully mitigated by the emission reduction credits (ERCs) and the Air Quality Management Agreement (AQMA). (RPMPD p.151.) However, the BAAQMD testified that their offset requirements are "not the same as mitigating the impacts of a project to insignificance under CEQA." (RT 10/21/02 p. 376.) They also testified that they did not analyze whether the project's impacts to the San Joaquin Valley are mitigated. (RT 10/21/02 p. 356.) The BAAQMD's review of the project was limited to determining whether the project met the requirements of their regulations and the agency deferred to the Energy Commission to analyze whether impacts to the San Joaquin Valley have been mitigated. (RT 10/21/02 p.357; Exh. 2Y1, Letter from BAAQMD to SJVUAPCD, July 24, 2002, p.3.) Therefore, staff respectfully requests the Committee clarify that BAAQMD's impacts analysis assessed only those impacts that occurred within BAAQMD boundaries.

- D. Condition of Certification AQ-SC 5 must be modified to ensure that the identified number of offsets are provided for each year of project operation.

The condition allows for offsets to come from mobile sources or stationary engines, but does not ensure that the reductions achieved will be valid for the life of the project. This is generally not a problem when obtaining offsets from large, stationary sources since these sources have approximately the same lifespan as the planned operation of a power plant; the offsets obtained can be considered effective for the life of the project.

The average life span of a mobile or stationary engine, however, is only 7.7 years. (Exh. 1, p. 5.1-31.) The offsets obtained from engines, therefore, are only effective at mitigating the project's emissions for this length of time. Hence, the condition of certification should clarify that the applicant must provide the identified number of offsets per year.

Therefore, staff suggests the following changes to the second paragraph of AQ-SC 5:

The project owner shall provide emissions reductions locally equivalent to 66.8 tons of NOx per year.

- E. It is feasible for the project to attain a 2.0 parts per million (ppm) NOx emission level with a 5 ppm ammonia slip level and necessary because ammonia slip contributes to PM10 exceedances.

The RPMPD states that while a 5ppm ammonia slip level, with a 2.5 ppm NOx level, is technically feasible, the benefits of a 10 ppm ammonia slip combined with a 2.0 NOx level are greater. (RPMPD p. 156.) Staff understands that the Committee may have considered a number of factors in its determination; staff, however, would like to clarify that both NOx and ammonia slip emissions contribute to significant impacts and a 5 ppm ammonia slip level with a 2.0 ppm NOx level, which would reduce emission of both pollutants, is technically feasible. (Exh. P. 5.1-21 to 22.) Indeed, a project currently under review by the Commission, Palomar Energy Project (01-AFC-24), has agreed to just these limits, and both the Malburg Generating Station Project (01-AFC-25) and the Magnolia Power Project (01-AFC-6) were recently certified with these limits. Additionally, these limits are considered BACT requirements in the South Coast Air Quality Management District. CARB's recommendation of the 5 ppm ammonia slip level, as noted in the RPMPD, is a further indication of the importance placed by other agencies on reducing this emission.

- F. Staff recommends some minor changes to the conditions of certification pertaining to construction impacts of the project.

As directed by the Committee, staff recently met with Applicant to discuss conditions of certification AQ-SC 1 through 4. As a result of that meeting staff recommends the following changes, which the Applicant has agreed to, presented in underline/strikeout:

**AQ-SC1** The project owner shall fund all expenses for an on-site air quality construction mitigation manager (AQCMM) who shall be responsible for maintaining compliance with conditions AQ-SC2 through AQ-SC4 for the entire project site and linear facility construction. The on-site AQCMM may delegate responsibilities identified in Conditions AQ-SC1 through AQ-SC4 to one or more air quality construction mitigation monitors. The on-site AQCMM shall have full access to areas of construction of the project site and linear facilities, and shall have the authority to appeal to the CPM to have the CPM stop any or all construction activities as warranted by applicable construction mitigation conditions. The on-site AQCMM, and any air quality construction mitigation monitors responsible for compliance with the requirements of AQ-SC4, shall have a current certification by the California Air Resources Board for Visible Emission Evaluation prior to the commencement of ground disturbance. The AQCMM may have other responsibilities in addition to those described in this condition. The on-site AQCMM shall not be terminated without written consent of the CPM.

**Verification:** At least sixty (60) days prior to the start of ground disturbance, the project owner shall submit to the CPM, for approval, the name, current ARB Visible Emission Evaluation certificate, and contact information for the on-site AQCMM and air quality construction mitigation monitors.

- AQ-SC3** The on-site AQCMM shall submit to the CPM, in the monthly compliance report, a construction mitigation report that demonstrates compliance with the following mitigation measures:
- a) All unpaved roads and disturbed areas in the project and linear construction sites shall be watered ~~until sufficiently wet for every four hours of construction activities, or until~~ sufficiently wet to comply with the dust mitigation objectives of Condition AQ-SC4. The frequency of watering can be reduced or eliminated during periods of precipitation.
  - b) No vehicle shall exceed 10 miles per hour within the construction site.
  - c) The construction site entrances shall be posted with visible speed limit signs.
  - d) All vehicle tires shall be washed or cleaned free of dirt prior to entering paved roadways.

- e) Gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.
- f) All entrances to the construction site shall be graveled or treated with water or dust soil stabilization compounds.
- g) No construction vehicles can enter or exit the construction site unless through the treated entrance roadways.
- h) Construction areas adjacent to any paved roadway shall be provided with sandbags to prevent run-off to the roadway.
- i) All paved roads within the construction site shall be swept twice daily.
- j) At least the first 500 feet of any public roadway exiting from the construction site shall be swept twice daily.
- k) All soil storage piles and disturbed areas that remain inactive for longer than 10 days shall be covered, or be treated with appropriate dust suppressant compounds.
- l) All vehicles that are used to transport solid bulk material and that have the potential to cause visible emissions shall be provided with a cover, or the materials shall be sufficiently wetted and loaded onto the trucks in a manner to provide at least one foot of freeboard.
- m) ~~All construction areas that may be disturbed shall be equipped with windbreaks at the windward sides prior to any ground disturbance.~~ Wind erosion control techniques, such as wind breaks, water, chemical dust suppressants and vegetation, shall be used on all construction areas that may be disturbed. ~~The~~ Any windbreaks used to comply with this condition shall remain in place until the soil is stabilized or permanently covered with vegetation.
- n) Any construction activities that ~~can~~ causes fugitive dust in excess of the visible emission limits specified in Condition AQ-SC4 shall cease when the wind exceeds 15 miles per hour.
- o) All diesel-fueled engines used in the construction of the facility shall be fueled only with ultra-low sulfur diesel, containing no more than 15-ppm sulfur.

- p) All large construction diesel engines, which have a rating of 100 hp or more, shall meet, at a minimum, the 1996 ARB or EPA certified standards for off-road equipment.
- q) All large construction diesel engines, which have a rating of 100 hp or more, shall be equipped with catalyzed diesel particulate filters (soot filters), unless certified by engine manufacturers or the on-site AQCMM that the use of such devices is not practical for specific engine types.
- r) All diesel-fueled engines used in the construction of the facility shall have clearly visible tags issued by the on-site AQCMM that shows the engine meets the conditions AQ-SC3 (p) and AQ-SC3 (q) above.

**Verification:** In the MCR, the project owner shall provide the CPM a copy of the construction mitigation report and any diesel fuel purchased records, which clearly demonstrates compliance with condition AQ-SC3.

**AQ-SC4** No construction activities are allowed to cause visible dust emissions at or beyond the project site fenced property boundary. No construction activities are allowed to cause visible dust plumes that exceed 20 percent opacity at any location on the construction site. No construction activities are allowed to cause any visible dust plume in excess of 200 feet beyond the centerline of the construction of linear facilities.

**Verification:** The on-site AQCMM shall conduct a visible emission evaluation at the construction site fence line, or 200 feet from the center of construction activities at the linear facility, each time he/she sees excessive fugitive dust from the construction or linear facility site. The records of the visible emission evaluations shall be maintained at the construction site and shall be provided to the CPM on the monthly construction report.

Respectfully submitted,

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